

APPARATUS AND METHOD FOR MULTIPLE GENERATION REMOTE BACKUP AND FAST RESTORE

ABSTRACT OF THE DISCLOSURE

5 A method for remote backup includes: mirroring data from a primary storage device at a first location to a secondary storage device at a second location; taking a snapshot of the primary storage device and of the secondary storage device; storing the primary storage device snapshot on a first snapshot volume at the first location; storing the secondary storage
10 device snapshot on a second snapshot volume at the second location; updating a data structure to record backup times for the first and second snapshots and to record locations of the snapshots on the snapshot volumes; and repeating the above so as to store multiple generations of snapshots. A method for fast restore uses a selected snapshot located at
15 the first location to restore data. If the selected snapshot at the first location is not available, the selected snapshot at the second location is used.